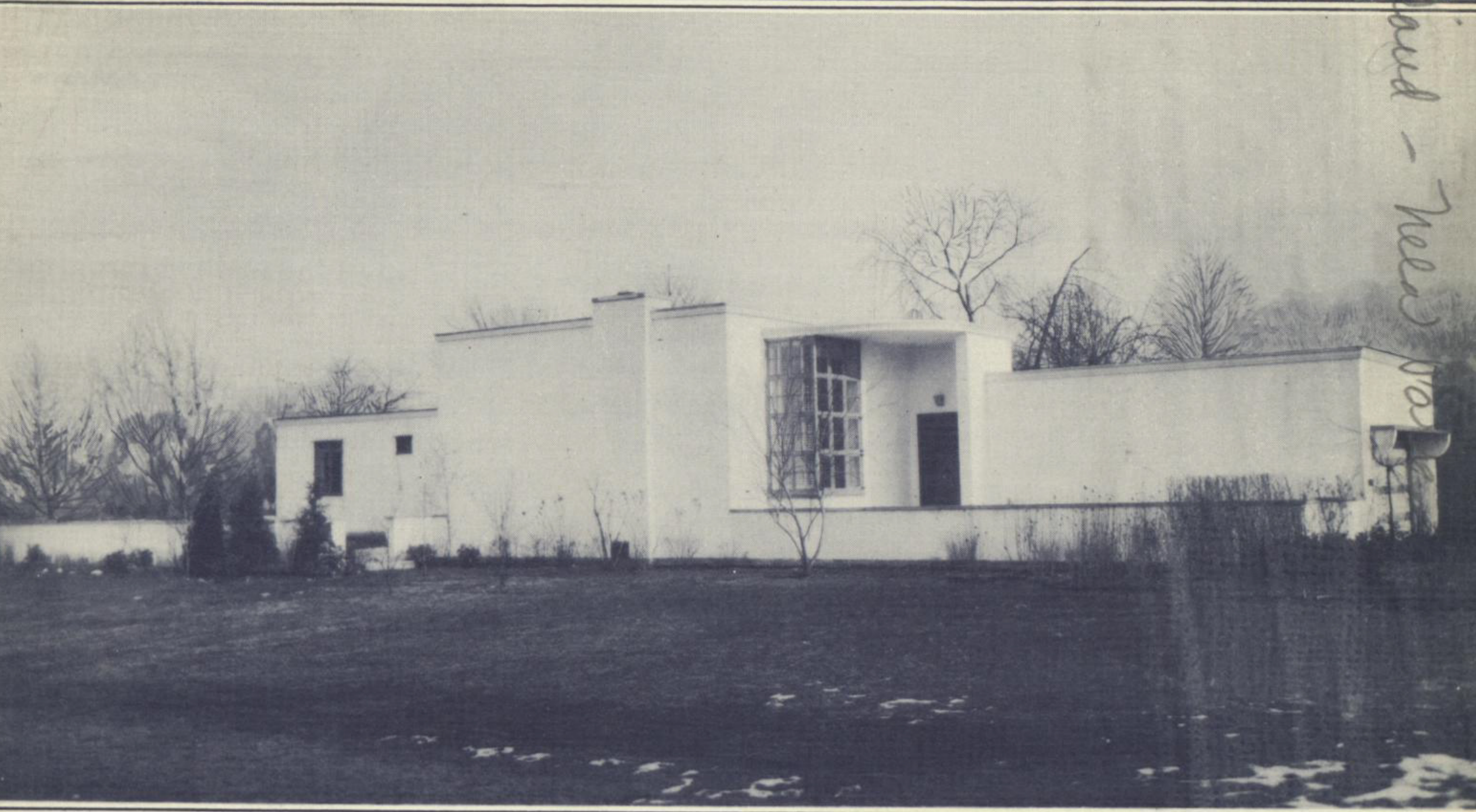
Cleveland - Nela Park



An Experimental House at Nela Park

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FOREWORD

With the National Housing Act making capital available for the building of new homes, there arises at once the pertinent question: What kind of house will offer the average purchaser the most value for his money?

Attempting to gather helpful data in this connection, the General Electric Company during the closing months of 1934 erected an experimental house at Nela Park, Cleveland. The project was purely an experiment to determine whether or not a plan of standardized room units is a satisfactory approach to the problem.

The plan takes into consideration not only the savings to be effected by standardization and mass production but capitalizes the benefits to be derived from the results of modern scientific research and invention as well. It recognizes the manifold advantages which a coordination of reliable labor-saving appliances, health equipment, and good construction materials bring.

The builders of the Nela Park experimental house offer this booklet not as a solution to the problem but merely to show the possibilities of a suggested method in the nation-wide effort to hasten a revival of the capital goods industry and to insure a higher standard of living for all.

BETTER VALUES

BETTER values in houses will depend largely upon our willingness to accept greater standardization and to eliminate some of the present conventional high-cost features. General acceptance of greater standardization and the elimination of the conventional high-cost features will depend largely upon our ability to prove:

(1) That it is possible to make certain changes which are necessary to obtain relatively low costs of construction, occupancy and maintenance, and still have a structure with a reasonably good appearance.

(2) That waste space, and the cost of providing it, can be avoided only by a carefully considered plan.

(3) That a considerable variety of houses can be produced with a few standardized units.

(4) That it is possible to build many houses consisting of standardized units and yet avoid unpleasant monotony.

The house built at Nela Park was an experiment for the purpose of gaining information in this matter.

The Nela Park house is located on a lot 60 feet wide and 150 feet deep. The rooms in this house are all on one floor. The ceiling of the living room is 12½ feet above floor level; the ceilings of the other rooms are 8 feet above floor level. The garage is attached to the front of the house. The house could be turned so that the garage would be on one side, but in this event a lot 100 feet wide would be required. The high living room roof and the main house roof are level, except for a sloping parapet at the outside walls. The living room roof drains through scuppers to the lower main roof, and from this point to the storm sewer through two inside downspouts. Adequate roof insulation insures coolness in summer and warmth in winter. The main floor of the house is raised 2½ feet above ground level. This lowers the cost of installing the plumbing and heating system and actually improves the floor space because it raises the windows above the usual shrubbery line.

The Nela Park house is equipped with a number of devices intended to decrease the work of housekeeping and add to the enjoyment of life. Built-in wardrobes, dressers and closets are so designed and located as to make for convenient use. One large fan and two smaller ones are installed in a penthouse on the roof. The large fan connects directly with the living room and the smaller ones connect directly with the kitchen. With the natural ventilation through the penthouse and forced ventilation from the fans, fresh air is provided at all times. The kitchen is completely equipped with modern labor-saving devices, and ample provision has been made for adequate lighting and other electrical appliances. No equipment of doubtful merit has been installed. The house is a fair conception of the Art of Living Electrically.

It is believed that standardized housing as herein described will greatly increase the certainty with which comfort conditions, as well as the reliability of equipment, can be predicted. Inasmuch as all of the equipment can be tested in advance, assurance

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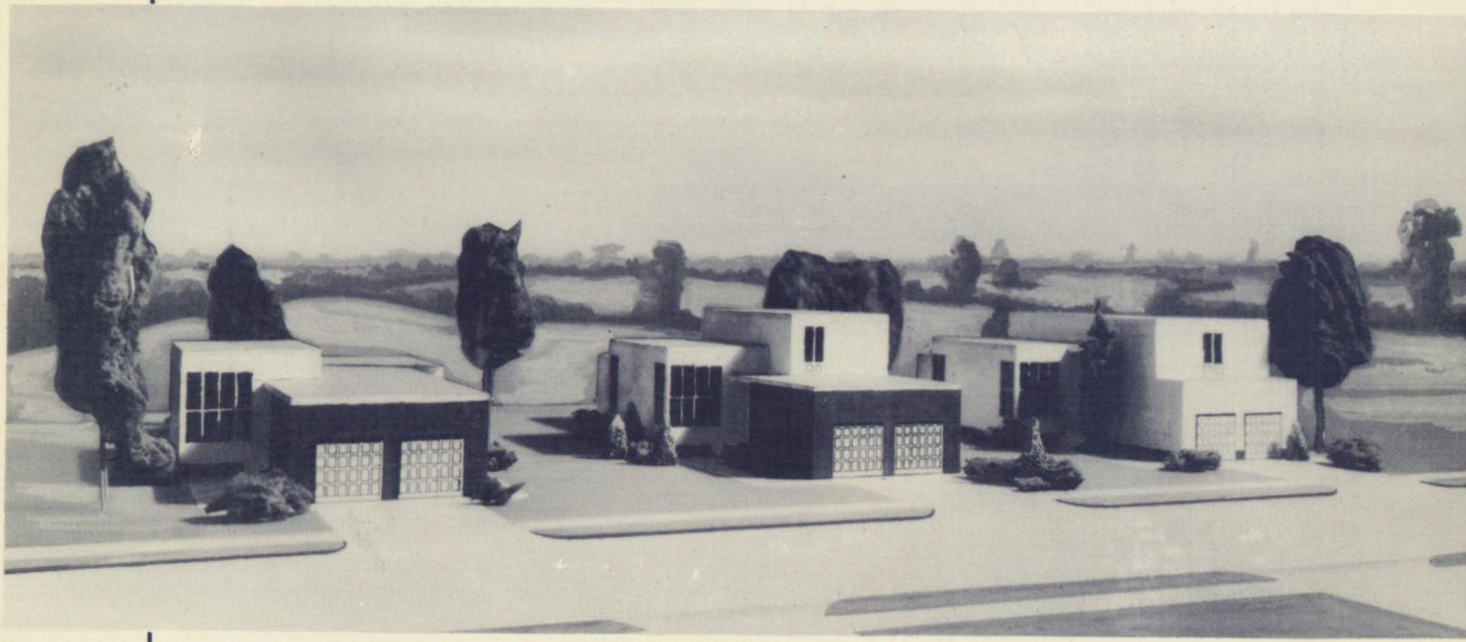
can be given to the prospective customer that the heating system, for example, is adequate; that the temperature distribution throughout the house is uniform; that accessories, fixtures and the method of installing them are first grade. This is in contrast to the ordinary house which one so frequently encounters, where many appliances prove inadequate due to the division of responsibility or because someone has failed to take account of the peculiarities of the individual house design.

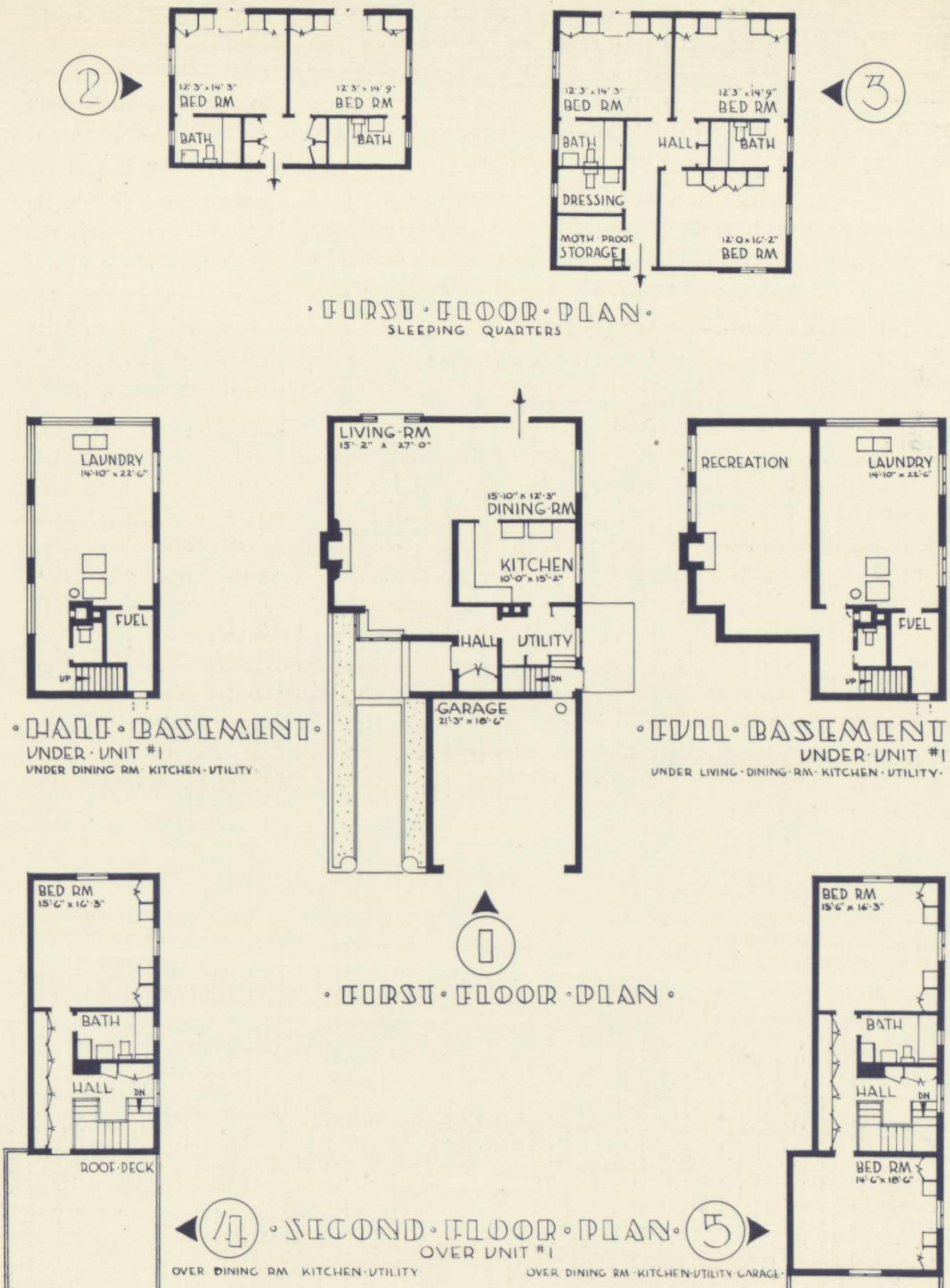
With adequate heat insulation and tested design, large saving in the cost of operating the heating equipment may be made, as well as saving in first cost. For the same reason, house cooling in summer time becomes a practical matter, whereas it is out of the question in many present-day houses, both as regards first cost and operating cost.

If the idea of built-in wardrobe chests and closets could be extended to include such essentials as the heating system, plumbing, wiring and refrigeration, for the standardized units, probably further saving in installation cost could be realized.

The experimental house at Nela Park has suggested the possibility of a group of houses consisting of the assembly of two or three carefully planned units to produce a minimum of two and a maximum of five sleeping rooms. (See illustration of Unit Floor Plans shown on next page.) Unit 1 consists of a living room, dining room, kitchen and garage, with a basement which may be large or small depending upon the use which is to be made of it. If a fireplace is desired, it is located in the space between the two living room windows. Space is provided in Unit 1 for a stairway to the roof. Unit 2 consists of two sleeping rooms and two bathrooms for first floor location. Unit 3 consists of three sleeping rooms, two bathrooms and a combination health and dressing room which may also be used as a small bedroom. Unit 4 consists of a sleeping room and a bathroom planned for second floor location over the utility room, kitchen and dining room. Unit 5 consists of two sleeping rooms and a bathroom planned for second floor location over the kitchen, utility room, dining room and a part of the garage.



This artist's conception of a street of these houses clearly indicates that such a street need not result in unpleasant similarity. This view shows the houses placed on 60-foot lots.



· FIRST · FLOOR · PLAN ·
SLEEPING QUARTERS

· HALF · BASEMENT ·
UNDER · UNIT #1
UNDER DINING RM · KITCHEN · UTILITY ·

· FULL · BASEMENT ·
UNDER · UNIT #1
UNDER LIVING · DINING · RM · KITCHEN · UTILITY ·

· FIRST · FLOOR · PLAN ·

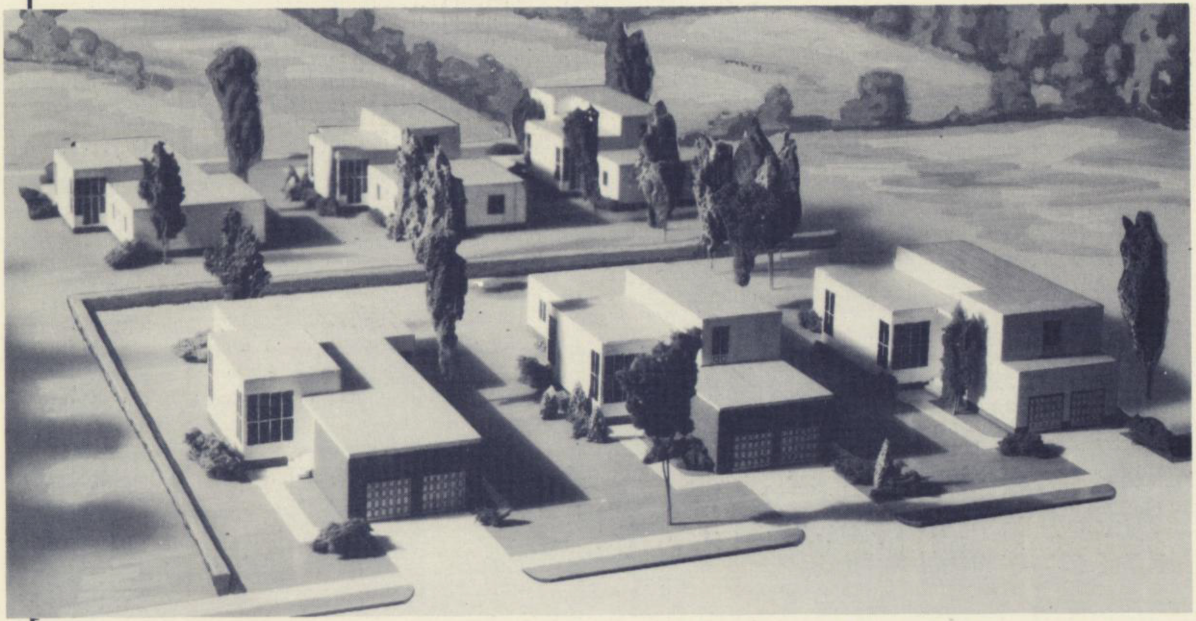
· SECOND · FLOOR · PLAN ·
OVER UNIT #1
OVER DINING RM · KITCHEN · UTILITY ·
OVER DINING RM · KITCHEN · UTILITY · GARAGE ·

FLOOR · PLANS · OF · THE · PRINCIPAL · UNITS

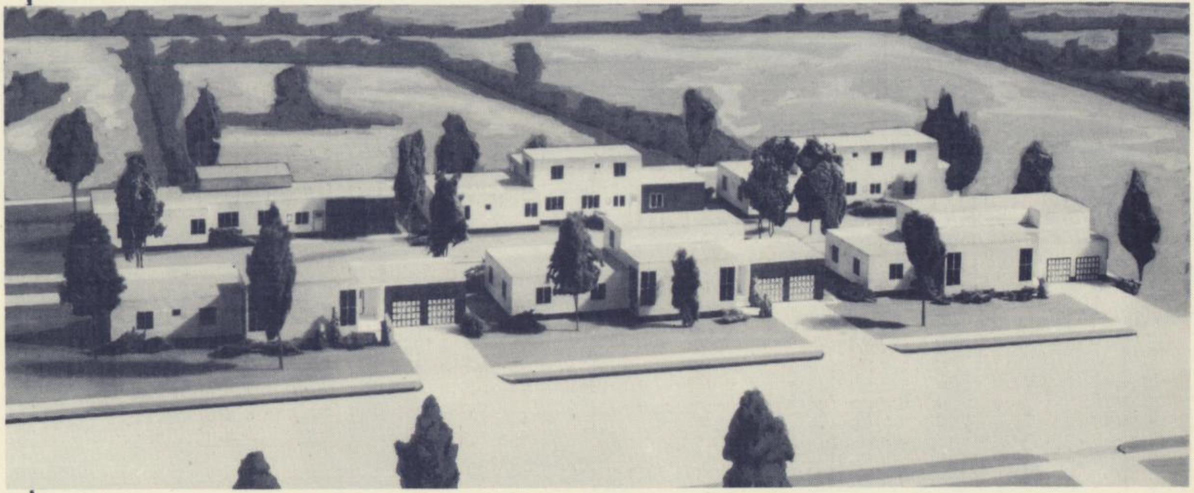
HAYS AND SIMPSON · · ARCHITECTS

FLEXIBILITY IN ARRANGEMENT

With slight modifications, the standardized room-units could be assembled to produce at least six different houses. To help visualize the appearance of such houses if they were actually built, three models, to the scale of ⅛-inch to the foot, were made. These models were photographed after placing them on 60-foot lots and also on 100-foot lots. The garage is square; therefore, on the 60-foot lots the garage doors have been located at the end of the garage, and on the 100-foot lots the garage doors have been located on the side of the garage.



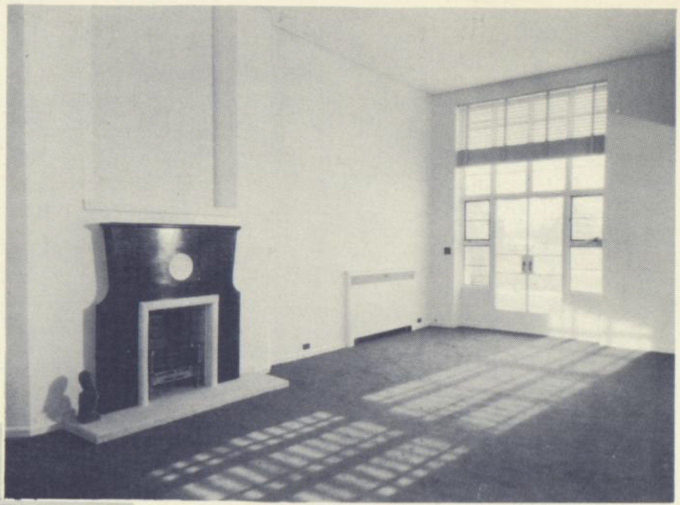
In the above grouping, each of the three houses in the foreground differs slightly from its neighbor. The house on the left consists of units No. 1 and 3—providing three sleeping rooms on the first floor. The house in the center includes unit No. 4, an additional bedroom on the second floor. The house on the right consists of units No. 1, 2, and 5—providing four bedrooms, two on the first floor and two on the second floor.

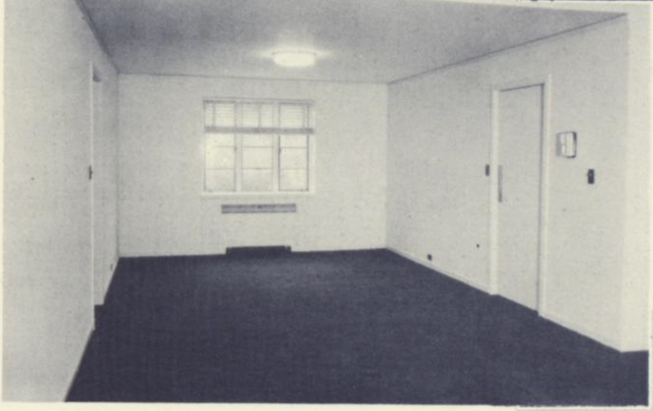


Here shown are the same three houses as above described and as they might look when built on 100-foot lots. Note that the garage doors have been shifted from the end of this square element to what in the other photo is a side. The houses in the background are mirrored views of the models here described.

CONVENIENCE and COMFORT

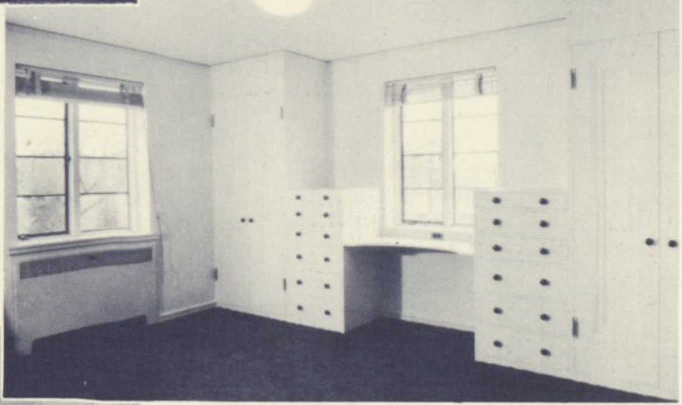
Right—A view of the studio-living room as seen from the entrance way. Large windows at either end permit plenty of daylight to enter. A neat fireplace, built-in radiators, and a wealth of electrical outlets are only a few of the convenience features that characterize this roomy room.

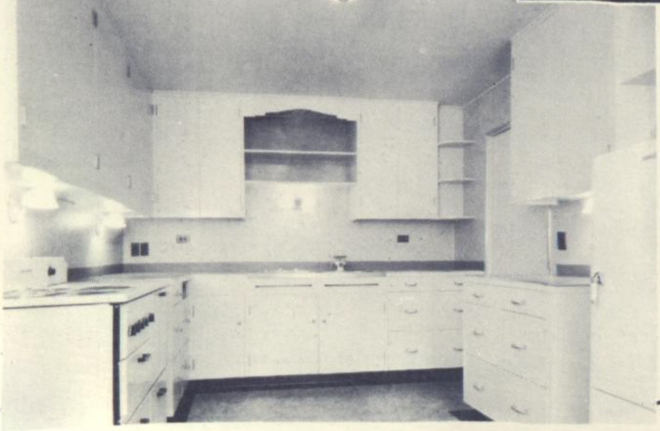




Left—The dining room "ells," so to speak, off the living room and, inasmuch as its ceiling height is several feet lower, it is distinctly a room in itself. The right-hand door, near the automatic heat regulator, leads to kitchen and basement. The left-hand door leads to the first-floor bedrooms.

Right—Here is a typical bedroom—so designed as to afford maximum convenience without wasting space. Handy clothes closets. Built-in chiffoniers with drawers that slide on waxed surfaces. Ample space for bedroom furniture. All combine to make dressing and undressing a real pleasure.





Left—A kitchen designed to make mother's chief task as light and pleasant as possible. It aims at maximum capacity with minimum waste space. It employs electrical servants from range to refrigerator, automatic ventilation, and local illumination.

GENERAL ELECTRIC COMPANY
NELA PARK, CLEVELAND

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